Passing Things Along: (In)completing Infrastructure

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Abstract

Infrastructure not only concerns the movement of things, but also is itself a movement. It is a movement that gathers up remnants, the disparate, and that which has been cut loose from discernible modes of belonging. This is the case even though we may acknowledge its concretized and stalwart features, its violent inscriptions, heavy sunk costs, and ephemeral architectures of financing. Infrastructure is a movement in perception, not simply by constituting multiple vantage points or lines of articulation, but by pointing out how things are constantly coming undone, playing with a risk that it is really able to hang together across actual and potential perturbance, that it can displace the possible salience of highly localized conditions, triggers, and alterations by always shifting loads, acting as if it is always somewhere else than it is.

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Prolific Statements

An increasing number of statements seem to be issued in the African and Asian urban districts where I have worked for many years. The proliferation of statements encompasses many factors, from the democratization of urban space, the ready access to social media, as compensation for disorientation, and as a reflection of a growing compulsion for individuals to repeatedly "announce" themselves. These statements are about many things. They profess, condemn, claim, elicit, and disclose. They test the waters; they provoke other statements. Statements seek and deflect attention. Statements are lines drawn in the sand, inscriptions that mark distance and progression. Sometimes they attempt to sum up what ought to be done, posit themselves as contracts and conditions for the willingness or capacity of persons to be part of specific kinds of places and relationships.

In Jakarta, for example, over the initial months of 2016, it seemed as if all kinds of residents were preoccupied with issuing statements about LGBT, as if those four letters constituted some kind of coherent entity, some kind of imperial force that needed to be addressed, something which the majority of statements sought to differentiate themselves from, as if the absence of a statement could be construed as complicity. It was if some kind of invasion was underway, which had to be identified and then combatted. In some respects such statements are an extension of others concerning the what some jokingly refer to as the "happy Muslim family" – where young middle class households self-consciously attempt to consolidate their presence within particular districts of the city through the rubric of Islamic propriety and then constantly employ various social media to share images reflecting household exuding a contented normativity. The viability of congealing such residential urban space appears then predicated on the continuous issuing of statements concerning appropri-

ate dress, behavior, gender roles, and consumption practices – both material and religious.

Statements delineate criteria for eligibilities; they seek to define the spaces in which individuals operate. Thus, statements act as an infrastructure, inscribing boundaries, mobilizing and materializing evidence of specific conditions. Statements draw lines among those considered worthy, eligible, and common, and inscribe divides among bodies and spaces. Statements are lines of delivery and articulation; they seal deals, define memberships, and incite antagonisms.

I reiterate these common understandings of statements, and portray statements as infrastructure, in order to reflect just how heterogeneous the compositions of households have been over time in the districts of Jakarta from which many statements about propriety are now being issued. Everyone seemed to know that many households were composed of adults who were not married, and in many instances not heterosexual. So-called popular neighborhoods of poor, working and lower middle class residents lived in all kinds of situations *with* one another even as official narratives of demarcation might express some overarching adherence to a set of specific gender and cultural norms. This living-with each other, however, was also predicated on residents making few if any statements about what they were.

As long as statements were not made identifying a range of transgressions from what was commonly assumed as the norm then such transgressions were not only tolerated but viewed as wedges, opening up spaces for maneuvers of all kinds, as well as oscillating alliances of sentiment, practice and viewpoints provisionally concretized as specific projects shared among various sets of residents. Potentially, transgressions – kept away from such designations in practice – reflected recognition on the part of residents that urban life required various "forays" into larger surrounds. It reflected recognition that individuals differentially positioned in relationship to structures of residence, occupation, and alignment with prevailing norms infused the district with a broader array of capacities that potentially could be called upon.

Here the choreography of social relations – the deployment of power necessary to coordinate the living-with and the sculpting of local relationality – was more a matter of coming up with the aesthetic forms capable of modulating contact among residents, shaping the ways in which residents witnessed and engaged each other. This is what Strathern (1988) would call the capacity of 'elicitation: how particular kinds of responses, predictabilities, commitments, and indifference can be extracted. How can people and their actions appear in ways that enable them to be relatable but at the same time where the differences brought into relationship do not necessary implicate the bearers of those differences as either culpable or dependent? How can residents in a district enact their ways of life such that they are "known" by others, but where that knowledge is not construed as a commentary about the manner in which specific lives are conducted? Again, this is a matter less of statements, less of lines of articulation that implicitly calculate the "weightings" each componential element brings to or bears from being in a particular relationship. Rather, it is finding an aesthetics that enables things to become simultaneously visible and invisible to each other, where a definitive line between them is not possible to discern. It is as if one sees something going on without seeing it, and therefore has no basis from which to issue statements about it.

Such an aesthetic is not only visual but aural as well. It is a matter of generating rhythms and waveforms that emanate from the densities of heterogeneous activities and forces elaborating multiple registers of sound impacting upon neurophysiological circuits that modulate affect, sympathy, and a preparedness to act. Such sonic atmospheres act as infrastructures for the enunciation of the exaltation required for collaborative practices – the sense of wonderment and ease required to live-with the ebbs and flows, the constraints and traumas of everyday life (see McKittrick 2016).

These efforts remain the work of representation, something which the clamor to make statements in the immediacy of social media tends to circumvent (Morris 2016). This work of representation may not have come up with specific ideals or forms capable of positing the concepts of more judicious, productive existences. Yet by sculpting motile sociability, particular practices and arrangements that on the surface could not easily settle with one another, which would be expected to induce rifts and accusations, were melded into proximities, orbits of mutual attentiveness that kept open the possibility of a collective voice.

A Spiraling Aesthetic
The built environment of these districts was critical to such aesthetics. Not only was the physical demarcation of plots, households, and functions often intentionally made ambiguous but the intensive compactness of the distribution of built forms with their wildly divergent materials, angles, architectural vernaculars, and uses rendered whatever took place intensely public and singular at the same time. As many districts began their existence with a homogenous outlay of measured plots, basic service provision, and uniform houses, they quickly became almost indistinguishable from those districts where land was entirely "self" allocated, built and serviced. These were districts where there were limited opportunities to withdraw or hide the critical features that might define the appearance of any resident, which also attenuated the need to make statements about definition since everything appeared more or less in some "common view." At the same time, what appeared in such a public perspective was constantly contingent upon the particular positions that bodies assumed while being viewed, and given that these positions were so materially and architecturally diverse, it was never clear just exactly what was being seen once it was seen.

While there were certainly well known norms and values at work in aggregating a collective identity in these districts, the heterogeneous way in which they were built to accommodate various trials and errors as residents sought to improve their living conditions meant that summation statements about where the district was headed, what could be legitimately experimented with or not, could never be definitively tied down. The built environment was open to successes and failures of all kinds, provisional settlements and accommodations, things being shifted around in a process of constant re-doing. An aesthetic of incompletion signaled not so much a specific stage in some aspirational development trajectory as much as an incessant gathering up of what was at hand in order to make something often without clear precedent. An atmosphere was generated that enabled a living-with not predicated on a living-for, as in an integration of effort and sensibility.

The relative absence of statements of propriety perhaps also has something to do with the ambiguity of property within many of these districts. For an unequivocal status of private property did not exist. Land in Indonesia in the last instance cannot be completely alienated. It is registered according to varying statuses that allow it to be *de facto* bought and sold, allowing exclusive rights to attain to an "owner", but which are also all subject to various forms of contested claiming and use rights. The enforcement of propriety thus had no material "back-up" in a definitive notion of property, so no matter how much residents might view residential status as a matter of eligibility according to particular norms of propriety, the very "property" of a district was replete with so many statuses and contestations that it was difficult for statements about any kind of propriety to be issued.

Returning to the notion of "gathering up" as the corollary in an aesthetics of incompletion, a group of Haitian writers popularly known as the "Spiralists" exemplify a process of saying something without statements, of saying being a gathering up of whatever is around to forge a world to live in with both has everything and nothing to do with the apparent terrain, its morphological or political features. It is a gathering up in an

expression without hesitation or plan, as things circle each other, move with and away from, and where nothing rules anything out.

Beginning in the mid-1960s Frankétienne, Jean-Claude Fignolé, and René Philoctète began writing projects invoking the form of the spiral as an aesthetics which attempted to both "bore into" the political dread of living in Duvalier-ruled Haiti and as a way to exceed all of the trauma of Haitian post-revolutionary culture as if the potential of a revolution traumatic to the rest of the world, thus "inviting" years of repression, could be lived differently in place. Unlike many of their literary compatriots, the Spiralists never left Haiti. Fignolé in fact served for many years as mayor of Abricots. The literary work avoided statements, instead opting for cultivating land-scapes full of remains, full of detached details not easily integrated into any program. The spiral was the antithesis of articulation; the gathering up in its equilibration between centrifugal and centripetal forces is not an account, not a line of valuation, not a device that places things in a respective or respectable position.

As the foremost commentator of this literary moment, Kaiama Glover, puts it, these works are full of:

> Long-suffering zombies, allegorical wanderers, century-hopping, institutionalized former slaves, and headless young housewives, the Spiralist char-acters seem to exist without reference, fragmented and unpredictable. Like musical passages in textual symphonies, they literally and figuratively bounce off, echo, double and reflect one another. They are signposts, harbingers, and rest stops – so many parallel or contradictory building blocks that con-tribute as much to the form as to the content of a given text. (33)

Take this selection from Frankétienne's *Ready to Burst* (1968):

> Who is calling to Raynand in the tentacled dark-ness? Jungle of invisible arms. Sharp edges of flat-tened voices. Viscosity of hairy hands. Forest of vines and glutinous intestines. Piles of ripped-out fingernails. Emaciated faces. His nerves, his senses on high alert.

> Raynand feels them on his heels. Close. Far too close. Stumbling against a piece of broken concrete, he falls down at the intersection of Jean-Jacques Dessalines Boulevard and Fronts-Forts Street. Face-first. He keeps rolling. Then comes to a com-plete stop. On his back. His body, a blazing torch. His limbs, bursts of flames. His head on fire, a flam-ing mass filled with exploding shells. Eyes open, he looks at the corner of the street whizzing by like wagons jam-packed together, mounted on rails like a high-speed train, an express train to the sea. It's funny … I'm taking the midnight express. It's beauti-ful, this aboveground landscape of neon signs! The sky chopped into ragged pieces. Neon flowers light up … shut off … light up again … Blue … red … green … yellow. How quickly it goes by, this silent, free-wheeling train to the dock! Blue-green … blue-red … deep yellow. Stereophonic surge in the middle of the night. The street lets out a long trumpet blast between the two rows of sealed-up houses. Brains crushed. Head aflame. Torchlight tattoo. Carnival. Mask. Fear … dead silence …
> (**http://www.warscapes.com/literature/ready-burst-excerpt**)

Here is a city as nervous system bearing and throwing off excessive loads as a resident is sur-rounded and extricated, jungle converted to city converted to jungle, the place of capture on a fast train to who knows where, everything incomplete, shocked open, ready to be refigured, to pass on.

Infrastructure Passing On

Besides statements, then, infrastructure consti-tutes a distributed view upon that which is nor-matively rendered as "near" or "far", "proper" or "improper." It is a viewpoint constituted in motion as infrastructure not only concerns the movement of things, but also itself as a move-ment. This is the case even though we may attend to its concretized and stalwart features, its violent inscriptions, heavy sunk costs, and ephemeral architectures of financing. Infrastruc-ture is a movement in perception, not simply by constituting multiple vantage points or lines of articulation. For if any piece of infrastructure is to be read as coherent entity from a vertically inflected gaze, a bird's eye view, its existence is predicated on a risk. This is a risk that it is really

able to hang together across actual and potential perturbance, that it can displace the possible salience of highly localized conditions, triggers, and alterations by always shifting loads, volumes, accelerations, traffic, and intensity somewhere else. The landscape through, over, and on which infrastructure runs is an oscillating entanglement of entities of all kinds – flora, fauna, bacterial, viral, material – which never stand still, and are incessantly recomposed.

If infrastructure is about passing things on, it then cultivates a perspective on a surrounds that is multiple, decentered, and shifting. As a method of formatting, of bringing form into existence and informing matter, infrastructure may seem to be informed by linear visions, clearly demarcated lines from "here" to "there" or a geometric arrangement of materials in space. But infrastructure also restitutes potentials that had been subtracted by subject-centered ways of seeing and making statements (Deleuze 1989), which are largely aimed at consolidating a specific position or colonizing particular angles on things. Infrastructure is never complete – either in its closure to further articulations or in its process of immediate decay. It may be repaired, expanded, and updated and, as such, it constantly shows the evidence of not only what is bears and extracts, or the force that it imparts, but of the limits of its anticipation. It never fully (or only) does what it says it will do.

Infrastructure can be read as the embodiment of specific instantiations of capital flows, the aspirations of various kinds of articulation, the concretization of political accords, strategic devices for socializing bodies and places, and as technologies for "throwntogetherness" (Massey 2005). Yet equally important, infrastructure can be seen as a gesture toward the uncertain stabilities that exist in and as a result of the territorialization of space into discernible points, units, tangents, and vectors. Instead of a constantly expansive hardwiring of metabolism, atmosphere and geomorphology, infrastructure is also an increasingly frenetic signaling of volatility. Each suture, hinge, circumvention or agglomeration is insufficient to

the uncertainty infrastructure both registers and constitutes.

Creative destruction makes infrastructure a plaything in the recalibration of value; exhaustion acts as a crisis that prompts repairs and renovation, and aesthetic incompatibility to prevailing sentiments subjects infrastructure to radical makeovers. But from its inception, infrastructure seems to point to the simultaneous presence of many temporalities – all of the actions never quite constelled as event, all of the intersections and transactions that either could have happened somewhere but didn't or that did but didn't go anywhere specific or didn't leave enough of a tangible trace from which to point back or move forward.

Technical Life
Whatever infrastructure does relies on recording techniques, narrative devices, architectural forms, and modes of visual and cognitive display--all of which filter, transmit and generate data and information in ways that are neither neutral nor transparent. This is not just about plans and tools, written-down or improvised. The technical is a way in which things come together, with and without us, in a process of energetic transmission, where new functions and operations kick-in in the coming together of specific elements and conditions.

We may make these technical devices or have a hand in them but the way in which they impact each other is outside of anyone's control. All these instruments bring their own temporal grammars and imaginations to bear upon the imaginative and affective horizons through which time, memory and durations are indexed, validated and taken forward. They create an entirely new set of possibilities. They are not the outgrowths of striving bodies but collisions of materials and processes that generate impacts far from their initial sites and "steady-states." As Hansen points out, technical operations configure environmental conditions of sensibility "not to confront perception with the transcendental sensible content that comprises its virtual con-

dition…but to expose as experience that (which) occurs without directly yielding any perception whatsoever" (page #). The individuated form of persons and collectivity draws from a stratum of multiple and incompatible energies and forces, swirling frictions, and irruptions from which individuals emerge as a provisional solution. Such a stratum possesses an infinite set of possibilities, and these are continuously replenished and reformed by the particular ways in which things, persons and social entities are actualized. Any actualization entails the coming together of elements, crystalized in a coordinated "body" that is coupled to an associated milieu, a set of conditions that have no other unity than that of a system put together with a given individual or collective (Hansen 2012). As a result, any reality that is part of such a milieu could enter into other relations. So any actualization posits it own potential re-assemblage elsewhere and in other terms.

A crucial supplement to this process is what Simondon (2009) calls the *transindividual*, a form of individuation that "bypasses the individual while still prolonging it" through the substantiation of environmental sensibility and capacity that creates a new individual reality. In other words, the *transindividual* is the domain of technical operations that work on the pre-individual stratum to create specific fields of potentiality and sense for individuals that come into being. These operations intensify human individuation by exposing it to forms of sensory experience, ways of experiencing the world that do not produce any kind of perception and that remains outside of consciousness. Technical operations generate forms of individuation that by-pass the particular association of an individual or collective with a given milieu and impacts directly on the sensibility of the overall environment, generating a subjectivity that is not bound to any particular subject (Hansen 2012). So technical operations (*technicity*) are a way of mediating between the pre-individual dimensions of the subject and *transindividual* individuation as a displaced subjectivity (Hansen 2012).

Whatever happens in a given location – a location in large part given, even gifted, as a by-product of an infrastructure which enables it to have a sense of definitiveness – ramifies in all kinds of directions. It is replete with tensions, potential maneuvers and actualizations of virtual scenarios that go many different ways. Any action may have its intended audiences, but it spills over. Even if not witnessed directly, it can be the subject of reports and rumors. Environs are replete with what Massumi (2015) calls "bare activities", imperceptible adjustments and immediately lived hypotheses about what is about to happen that incline persons to attend to particular textures, pathways in the landscape at hand. A thickly configured affective field pulsates with tensions constantly worked under any radar or conscious deliberation. Infrastructure intervenes not only to constitute starting positions from which to trace webs of causation, relevance, and impact but also to etch out channels of evacuation. Infrastructure is channels for passing things, for passing us on.

It is not only important what infrastructure brings together, how it connects actions, bodies, and sites, but also how it provides channeled lines of flight that enable people and things to exit from concentrations – a way to get away from having to absorb or be the bearings of work, home, institution, or place. Infrastructure seems also to "run away" from the intense simultaneity of multiple temporalities – the prospects that many things could and did happen somewhere. So the burden of bearing the weight of such intensity is displaced through the connective tissues of infrastructures. We largely know what the vast multiplicity of activity taking place concurrently and incipiently means for us in terms of their likely causations and impact on our lives through infrastructure. But, but we are constantly reminded about what we don't know by it as well.

Our everyday routines and itineraries constantly skirt on the interface between habituation and improvisation, where improvisation entails knowing from where we set off from but

always raises that question about how to get "home." Imagine how it is possible to leave your house and set off and keep going without having any destination in mind other than the next step. If you are sufficiently funded you can keep on going indefinitely. Without map, plan, or anticipation, the itinerary becomes an entanglement of memory, impulse, desire, and calculation.

To continue constantly without a destination in mind is the implicit premise of infrastructure. Even as it orders and structures discernible courses of action and conveyances of cause and effect, it also seems to set things loose, pointing to how turbulent whatever seems stable actually is. We are confronted with a world of impersonal forces indifferent to our existence and forces propelled as the unforeseen consequences of prior actions. As such, we largely navigate this world indirectly, rather than confronting such forces head-on. Infrastructure itself tries to elide and circumvent these same forces, constituting a bet that by enfolding materials, places, and bodies into various connections the responsibilities for engaging these forces will be reciprocally distributed among the "connected". That as recipients of what infrastructure does we become complicit with the bet that we can dodge bullets coming from unseen directions. By offering to tie things down, to make things relate, to bring what is far near and to transport what is near to further regions, infrastructure becomes a confidence game.

This doesn't mean that things and people are not stuck in place, stuck in routines, stuck in dead end futures. Infrastructures can function as traps, promising to enable and facilitate only to prey on our aspirations and then manipulate or immobilize us. At the same time, statements are often necessary as the boundary drawing mechanisms that enable specific "cuts" (Strathern 2011) in the unyielding streams of relationality that urbanization seems to posit. Statements do enable provisional moments and operations of cohesiveness and coordination among an ensemble of various materials and powers. They are inscriptions of boundaries that constitute recognition of

commonality, of things being in the same place together, of administrative jurisdictions, regulatory apparatuses applicable to a coherent territory, even as territories of course overlap, veer off, intersect and dissipate.

As Keller Easterling (2014) puts it, infrastructure embodies particular dispositions, particular capacities to operate on and effect users in specific ways as a kind of power in readiness. It lures and inclines, and we, in return, are inclined toward it so that a holding takes place. So captivation can become capture. Held in place we are subject to the extraction of our attention and energies.

Yet, infrastructure can also render itself expendable. In Jakarta the problems that infrastructure attempts to address have largely come about through overbuilding and through the attempts to direct the rhizomatic flows of heightened rivers and creeks into structured channels of evacuation, a maneuver which, in the concomitant diminution of flood basins, exacerbates floods.

It is increasingly difficult to ascertain just what infrastructure does articulate. The intricacies of information economies configure new spatial dimensions of the vertical and the horizontal. In what Benjamin Bratton (2016) calls "the stack," promiscuities of all kinds are superimposed on each other – the confluence of interoperable standards-based complex material-information systems. Each place, person, or locale is the superimposition of proliferating signifying systems. What something is or could be, what it can do, and where and with what it can relate is something increasingly multiple, all over the place. It takes place in such a way that no place belongs to any particular "sovereign decision".

There can be no easy or even arbitrary declarations of what belongs or what does not, about who is friend or enemy. The various ways in which entities are located and addressed, in various networks of information, means that there can be many layers of sovereign claims over the same site, person or event. Bratton includes the

example of ubiquitous computing, which will soon be capable of assigning unique addresses to a near-infinite variety of shifting forms of relationships between things. Also, he cites the ways in which augmented reality directly projects a layer of indexical signs upon a given perceptual field of vision, and literally dislocates it from any single set of coordinates.

The Rush to Build

If infrastructure also operates as a means of passing on, to what extent does it contribute to its own disappearance? To what extent is it a tool that seeks to make itself obsolete, or rather, to actively maintain a sense of incompletion? It is possible to see how these questions play out in the rush to build things that currently sweeps across many cities of the Global South.

Infrastructure always seems to promise something, and so often it seems as if it is a promise intended to be broken. Whether this is a matter of intended deceit or an ingenuous miscalculation as to how infrastructure will actually be used and the costs entailed to keep it going, those responsible for its care often run to keep up or simply disappear from view. Public housing, for example, has long seemed to promise that even the poor could have access to a livable environment, and no matter how much residents may take pride in their surroundings and learn to manage seeming unworkable densities of occupation, housing authorities ended up being the actors that underestimated the work involved, or more maliciously sought to constrain the potentials of their own creations.

Infrastructure can't really promise anything. Even as infrastructure emplaces capital flows, the specificities of materials, actors, and technicities are not definitively tied down as evidence of macro-structural maneuvers. They are also their own things and constitute their own *alliances*. Here, alliances refer to *what might be going on* without the obligation to marshal specific forms of verification (Castro 1992, Lury 2012).

Across the region of Jakarta there is a rush to build. Politicians, developers, investors, bureau-

crats, and ordinary residents seem to talk of little else but the need to build things – from new freeways, transit systems, luxury sub-cities, flood canals to thousands of small houses and commercial buildings.

While infrastructural products may be replete with technical specifications, the enactment of infrastructure entails a complex process of assembling sentiment, authorization, finance, and labor. It has to disrupt and implant, anticipating as much as possible the ramifying implications of this duality. As an assistant to one of Indonesia's major property developers aptly puts it, "it is a constant effort to keep things from slipping away." Urban infrastructural development not only constitutes a guess on where the city is "going", it also elicits the possibility of being part of a cascading and lateral chain of significations and realignments not necessarily imprinted with the weight of particular causations or history.

But it also instigates a temporality "set loose" from calculation – a process of associating place, people, institutions, finance and politics that ramifies in unanticipated ways. This instigation can be materialized as the disentangling of landscapes, ecologies, and territories; it can be materialized as the regeneration of places otherwise considered dissolute or beyond repair; it can be materialized as the redemption of past efforts and histories, the realization of long-held aspirations, or the concretization of the possibility of another way of living.

This instigation is something that encompasses and exceeds speculation. It not only operates within the rubrics of the financialization of risk as a means of hedging a multiplicity of probable futures for how a specific infrastructure will operate and the value it will have. This instigation also aims to posit infrastructure as *detached from reason,* within a scenario that cannot be fully calculated now, and which imbues it with an adaptability to futures where no matter what happens there is possibility of recouping something which itself cannot be specified.

Even if contracts, policies, projects, technicities, and brute force hold the constitutive com-

ponents of roads, rails, housing developments, flood mitigation conduits, water reticulation, or sanitation treatment systems in place, each of these components are also enmeshed in a plurality of other relationships and statuses. In Jakarta, and in many other cities of the so-called "South", the rush to build tries to outpace escalating land prices, labor shortages, changing policy frameworks, cost overruns and widening disparities in interest rates incurred by borrowing in different currencies. It tries to outpace a creeping diversification of options in the housing market as both available and anticipated stock remain unaffordable to 70% of the population looking for accommodation.

In the commercial property market, developers try to outpace the intense competition waged at the level of occupancy rates, a byproduct of which is for owners to offer attractive long-term leasing arrangements or leases with flexible escape clauses, but which are paid for in U.S. dollars. As many new commercial buildings are being built on the sites of a first generation of office towers, the rush to build also tries to maximize the locational advantage of no longer appealing, half-empty commercial stock. But in order to do so, developers face the prospect of waiting out long leases to existing tenants or compensating for early termination. The rush to build is also rooted in the fact that almost all developers have to offer their own so-called "cheap payment" plans because of prohibitive bank mortgage rates. These payment plans require a nominal down payment and anywhere from 12-48 subsequent monthly payments prior to the completion of the project, money that is immediately re-invested in new construction projects. As the value of an apartment appreciates on average 30-35% between the time of sale and its completion, many sources of financing are applied to the acquisition of such property in order to attain eventual rental income or simply play the game of capital appreciation. While real demand seems to be sustained, developers still rush to outpace possible bubbles and oversupply.

The rush to build is also shaped by the recent opening up of perpetual leaseholds to foreign investors at the high end of the housing market, which has the effect of extending the territory of the luxury property market into solidly entrenched working class districts. The rush to build is also related to the fact that only a minority of new apartment owners actually occupies the premises, instead renting them out in all kinds of tenancy arrangements. The initial round of providing so-called affordable vertical living has demonstrated the complex everyday politics that can ensue as a large base of heterogeneous residents with no prior history with each other try to consolidate particular spaces and styles of operation. It is not clear what kind of contested or accommodating atmospheres this is going to produce in the long run, so developers rush to build before particular negative impressions take hold.

All of this rush to build, in aggregate, creates the very conditions that developers seek to outpace. In their very efforts to stabilize they introduce intensive instabilities in the system that has to be continuously reformatted. On a broader level there is the widespread conversion of residential into commercial property, but largely under the radar, so there are efforts to stabilize this trend without prompting rezoning or commercial licensing that would increase costs, and these efforts entail maintaining the accouterments of a residential façade. Older, largely vacant commercial buildings are surreptitiously refurbished as large-scale rooming houses in order to maintain some viable income flow.

Variegated and rapidly shifting land use patterns, speeded up circulation of residents across different housing locations, the formation of growth boundaries in the form of massive industrial land estates at the urban periphery, the youth demographic that floods the market with new workers every year, the accelerated roll-out of flyovers, bypasses, and rail systems, the uncertain morphological and ecological implications of massive concentrations of new developments in particular parts of the city – all impact upon each

other in ways that amplify the sense of exigency to deploy infrastructure as a marker of stabilization.

But this deployment requires its own twists and turns. It entails complicated negotiations as to the extension of road widths, the resettlement of hundreds of thousands of workers who use roads, sidewalks, verges, riverbanks, rail lines, and underpasses as places of residence and employment. It entails the consolidation of land replete with various histories, ownership structures, entitlements, and functions. It entails negotiations with different kinds of authorities who derive their power from the mobilization of different interests and constituencies frequently living and operating side by side, but often in very different worlds.

It means responding to the demands of a more politically involved middle class that wants a better quality of life and the realization of particular imaginaries about what a functional city looks like. It means staying under the threshold of potential antagonisms that might slow down progress of projects producing the prospect of substantial financial loss. It entails trying quickly to establish particular facts on the ground, which even if deemed to be violations later on are too sizeable to be removed or substantially altered. So infrastructure here is a politics of modulation, of bringing volatility to a workable standstill so that particular projects can materialize. And then pass on.

Affordances

An aesthetics of living-with based on incompletion and on the entangling of public witnessing with singular perspectives was critical for enabling popular districts to avoid the need to generate statements about eligibility, status, and propriety that might precipitate the exclusion of specific kinds of residents. Nevertheless, statements need to be made about the basic capacities of such districts to provide such affordances. For how they are themselves afforded opportunities in a larger urban system is increasingly a matter of staking claims within overcrowded fields of needs, aspirations and demands.

These districts are rapidly being transformed through disentangling the material supports of this aesthetics and displacing residents to more highly individuated residential situations at the periphery of urban regions. Here they accrue increased levels of indebtedness for assets of uncertain value and longevity. Already, residents living on the outskirts are trying to find ways to get back to the center, but now in a manner that is much more precarious and devoid of the supportive relationships cultivated over many years' duration.

A critical question is how "big stories" of transformation can be put together – knowing the limitations of what statements do – and yet still remain cognizant that cities are replete with intricate complexions and visibilities – where much of what intersects and impacts upon each other remains out of view or calculation.

It is not exactly clear how to assess the ways in which the relationships among infrastructure, mobility, the biophysical processes of the city, and its larger ecological footprints will reach some critical tipping point. It is not certain just how the absolute emergency will make itself known in a way that compels some kind of action. Finance capital has not yet figured out modalities sufficient to the guarantee the profitability of low carbon production and infrastructure. As the terms of viability for the new horizon of energy consumption are yet to be invented, there is a time-limited window of opportunity to execute infrastructural transitions that promote more egalitarian citizenship and sustainability.

What we do know is that the elaboration of a viable risk profile for climate adaptation is nearly impossible in a situation where decisions about the kinds of technologies, prices, and investments entailed remain so uncertain. Current debates about the fiscal instruments needed to drive the transition to green infrastructure are bogged down in multilateral discussions still locked into the language of integrating nation-states. This means that in situations where

substantial investment in *basic* infrastructure is urgently needed, the relative absence of viable regulatory frameworks makes transactions costs prohibitive. It also makes little sense for cities to become overly preoccupied with the terms of international cap and trades, emission reduction mechanisms, and the harmonization of distinct bands of warming into aggregate measures. Yet, since infrastructure investments largely generate profit at the urban scale, cities need to be doing something.

Yet, cities experience widespread institutional inertia; few of the basic preconditions exist for city governments to put building blocks in place. There is the need to more explicitly understand the political institutional gridlock that characterizes most cities. Despite these limitations, whilst knowing the systemic nature of the gridlock *and* the degrees and types of uncertainty involved, the material base of cities will need to be radically restructured. Initially, this involves engaging and reworking existing policy networks that cut across national divides, as well as forging interconnections among stylistically divergent local activist civic projects.

But with few exceptions, how cities facilitate, produce, and absorb new material conditions is not yet apparent. Fifteen to twenty years will be needed to build the economic platform, institutional intelligence and networks capable of adhering to the efficacy standards specified in international agreements. The massive population dispersals that will ensue if adaptation strategies are not implemented requires making the urban infrastructure conundrums explicit, as well as the potentials to link social justice and green agendas. The trajectories of adaptation and restructuration are highly contingent, and so there are various ways to respond to these imperatives.

The objective is to posit how it might be possible to move beyond the current orientations of "progressive" urban politics. These current orientations either emphasize neoliberal misery, green revolution salvation, repeated attempts to mobilize sufficient numbers and design mecha-

nisms to make participatory planning and decision-making effective, or the overly pragmatic realism of corporate associations of the urban poor which concentrate on building a semi-autonomous safety net that is recognized as inadequate in the long run but capable of making significant improvements in the present. These orientations are limited in that they do not constitute the sum total of the political imaginary at the level of urban districts and neighborhoods.

While Colin McFarlane's (2011) important monograph *Learning the City* might suggest otherwise, learning how to use the urban, rather than simply strategically working within it remains something undernourished by most social movements. Part of the work of being in the city entails a range of literacies that have to be honed over time. The popular practices of the past require updating in new forms. Part of the importance of everyday urban practices is that it constitutes a repository of urban learning, with important skills required in how to forge and conduct new relationships among people, places, and things. An important role for public policy, then, is how institutions can effectively pay attention to the logics and dynamics of everyday in order to creatively animate a broader public awareness of the larger issues concerning the relationships between justice, redistribution, climate adaptation and infrastructural change. Recasting urban life, then, is at the core of such a pedagogic, social learning project.

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